

=> b reg
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STRUCTURE FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9
 DICTIONARY FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9

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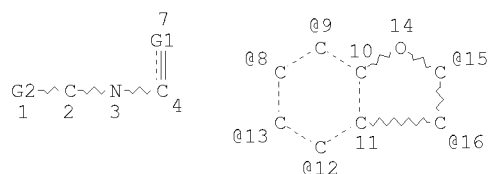
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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=> d que sta l14
 L12 STR



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 VAR G2=8/9/12/13/15/16
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 DEFAULT ECLEVEL IS LIMITED

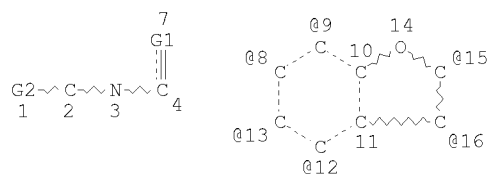
GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
 L14 4856 SEA FILE=REGISTRY SSS FUL L12

100.0% PROCESSED 241811 ITERATIONS
 SEARCH TIME: 00.00.02

4856 ANSWERS

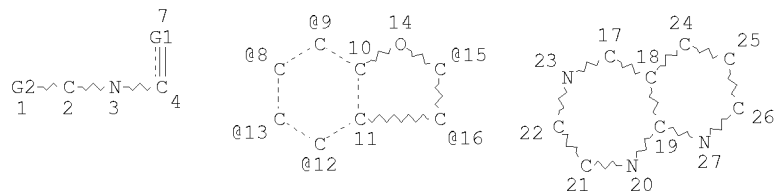
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GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
L14 4856 SEA FILE=REGISTRY SSS FUL L12
L21 STR



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NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE
L23 42 SEA FILE=REGISTRY SUB=L14 SSS FUL L21

100.0% PROCESSED 43 ITERATIONS 42 ANSWERS
SEARCH TIME: 00.00.01

=> b hcap
FILE 'HCAPLUS' ENTERED AT 16:36:32 ON 28 NOV 2007
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FILE COVERS 1907 - 28 Nov 2007 VOL 147 ISS 23
FILE LAST UPDATED: 27 Nov 2007 (20071127/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr 127 tot

L27 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 AN 2007:64030 HCAPLUS
 DN 147:72815
 TI Preparation of 3-heterocyclacylacrylamide derivatives as FabI protein
 inhibitors for treating bacterial infection
 IN Pauls, Henry; Berman, Judd M.
 DA Affinium Pharmaceuticals, Inc., Can.
 SO PCT Int. Appl., 1999p.
 COVEN: PFX32
 DT Patent
 LA English
 FAN.CNT 1

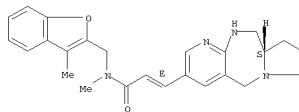
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GD, GM, GU, HP, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MS, NA, SD, SL, SZ, TS, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
PRAI 2005US-742514P			20051205	
2005US-754024P	P	20051223		
OS MARPAT 147:72815				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title comps. [I; A = a monocyclic ring of 4-7 atoms containing 0-2 heteroatoms, a bicyclic ring of 8-12 atoms containing 0-4 heteroatoms or a tricyclic ring of 8-12 atoms containing 0-6 heteroatoms wherein the rings are independently aliphatic, aromatic, heteroaryl or heterocyclic in nature, the heteroatoms are selected from N, S or O and the rings are optionally substituted with one or more groups selected from C1-4-alkyl, OR'', cyano, OCF₃, F, Cl, Br, Iodo; wherein R' = H, alkyl, aralkyl, or heteroaralkyl; R' = H, Me; R = 0-Q12, 6-amino-3-pyridyl; R1 = OH or -O(CH₂)nAr; wherein n = an integer from 1 to 6 inclusive; Ar = aryl or heteroaryl; R2 = H or C(O)R3; R3 = H, alkyl, or aryl; R4 = OH or N(R3)2; the two R5 taken together form a spirocycloalkane, a spiroaryl, or a spiroheterocycloalkane; R6 = H, OH, alkyl; R7 = alkyl, aryl, cycloalkane, or heterocycloalkane; M = H or OH, or two M taken together form O or N(R3); provided that when R is Q1 or 6-amino-3-pyridyl, R' is (R)-Me) or pharmaceutically acceptable salts thereof are prepared. These comps. including 3-(pyridin-2-yl)acrylamide, 3-(7-oxo-5,6,7,8-tetrahydro[1,8]naphthyridin-3-yl)acrylamide, and 3-(8-oxo-5,7,8,9-tetrahydro-6-oxa-1,9-diazabenzocycloheptan-3-yl)acrylamide derivs. have FabI inhibiting activity, preferably inhibiting the Fab I activity of a microbe with an IC₅₀ of at least 1 order of magnitude lower than the IC₅₀ for inhibiting enoyl CoA hydratase of a mammal. They may also inhibit other enzymes, including those similar to FabI either structurally or functionally, for example, Fab K. Kits and comps. containing the comps. I and methods of treating a subject with a bacterial illness are also disclosed. Thus, 5-bromo-3-(pyridin-2-ylmethoxy)pyridin-2-ylamine was coupled with N-methyl-N-(3-methylbenzofuran-2-ylmethyl)acrylamide in the presence of diisopropylethylamine, P4(OAc)₂, and tris(o-tolyl)phosphine in DMF under refluxing overnight to give 27% (E)-3-(6-amino-5-(pyridin-2-ylmethoxy)pyridin-3-yl)-N-methyl-N-(3-methylbenzofuran-2-ylmethyl)acrylamide. In *Staphylococcus aureus* FabI enzyme inhibition assays, the invention comps. showed the IC₅₀ values ranging from .apprx.0.05 μM to .apprx.5.0 μM.

IT 941604-33-7P 941604-88-2P, (E)-N-Methyl-N-[(3-

L27 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 methylbenzofuran-2-yl)methyl]-3-(4-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-b][1,4]diazepin-8-yl)acrylamide 941605-02-3P,
 (R,E)-N-Methyl-N-[(1-(3-methylbenzofuran-2-yl)ethyl]-3-(4-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-b][1,4]diazepin-8-yl)acrylamide
 941605-05-6P, (R,E)-N-[(1-(3-Ethylbenzofuran-2-yl)ethyl)-N-methyl-3-(4-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-b][1,4]diazepin-8-yl)acrylamide
 941605-58-9P, (E)-3-(3,4-Cyclopentyl-2,3,4,5-tetrahydro-1H-pyrido[5,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]acrylamide monotrifluoroacetate
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of 3-heterocyclacylacrylamide derivs. as FabI protein inhibitors for treating bacterial infection)
 RN 941604-33-7 HCAPLUS
 CN 2-Propenamide, 3-[(9a5)-7,8,9,9a,10,11-hexahydro-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuran-2-yl)methyl]-, (2E)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)
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 CRN 941604-32-6
 CMF C25 H28 N4 O2
 Absolute stereochemistry.
 Double bond geometry as shown.

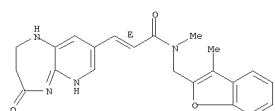


CM 2
 CRN 76-05-1
 CMF C2 H F3 O2



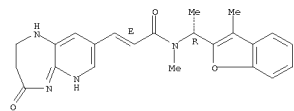
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 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuran-2-yl)methyl]-3-(2,3,4,5-tetrahydro-4-oxo-1H-pyrido[2,3-b][1,4]diazepin-8-yl)-, (2E)- (CA INDEX NAME)
 Double bond geometry as shown.

L27 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



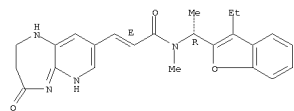
RN 941605-02-3 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(1R)-1-(3-methyl-2-benzofuran-2-yl)ethyl]-3-(2,3,4,5-tetrahydro-4-oxo-1H-pyrido[2,3-b][1,4]diazepin-8-yl)-, (2E)- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 941605-05-6 HCAPLUS
 CN 2-Propenamide, N-[(1R)-1-(3-ethyl-2-benzofuran-2-yl)ethyl]-N-methyl-3-(2,3,4,5-tetrahydro-4-oxo-1H-pyrido[2,3-b][1,4]diazepin-8-yl)-, (2E)- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

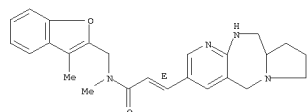


RN 941605-58-9 HCAPLUS
 CN 2-Propenamide, 3-(7,8,9,9a,10,11-hexahydro-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl)-N-methyl-N-[(3-methyl-2-benzofuran-2-yl)methyl]-, (2E)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 941605-57-8
 CMF C25 H28 N4 O2

Double bond geometry as shown.



L27 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

CM 2
 CRN 76-05-1
 CMF C2 H F3 O2



L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)

AN 2007:454282 HCAPLUS

DN 146:462291

TI Preparation of heterocyclyl acrylamide compounds as FabI inhibitors

IN Manning, David Douglas; Decornez, Helene Yvonne; Surman, Matthew David; Martin, Fernando J. L.; Rannauth, Jallall; Toro, Andras; Berman, Judd M.; Sampson, Peter; Pauls, Henry; Sargent, Bruce Jeremy

PA Affinium Pharmaceuticals, Inc., Can.

SO Can. Pat. Appl., 232pp.

CODEN: CPXXEB

DT Patent

LA English

PAN,CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA---2568914	A1	20051204	2005CA-2568914	20050606
WO2007053131	A2	20070510	2005WO-US19805	20050606
WO2007053131	A3	20070802		
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EP---1828167	A2	20070905	2005EP-0858503	20050606
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PRAI 2004US-576945P	P	20040604		
2005WO-US19805	W	20050606		
OS MAPPAT 146:462291				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A = monocyclic ring containing 0-2 heteroatoms, bicyclic ring containing 0-4 heteroatoms, tricyclic ring containing heteroatoms containing 0-6 heteroatoms (wherein the rings are independently aliphatic, aromatic, heteroaryl, etc.), the heteroatoms are selected from N, S and O and the rings are optionally substituted with alkyl, CN, OCF₃, etc.); R = O1, etc.; R1 = H, alkyl, aryl; R2 = H, alkyl, aryl; R1 and R2 may combine to form a fused ring.; R3 = H, alkyl, aryl; R2 and R3 combine to form a spirocyclic ring.; R5 = H, alkyl, aryl] or their pharmaceutically acceptable salts were prepared. For example, Pd(OAc)₂ catalyzed coupling reaction of N-(2-ethoxy-3-trifluoromethoxybenzyl)-N-methylacrylamide, e.g., prepared from 2-trifluoromethoxyphenol in 4 steps, with 7-bromo-3,3-dimethyl-1,3,4,5-tetrahydropyrido[2,3-e][1,4]diazepin-2-one followed by treatment with HCl afforded compound II hydrochloride. In E. coli FabI enzyme inhibition assays, the invention compds. showed the IC₅₀ values ranging from 0.05 μM to 100 μM.

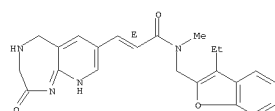
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894851-82-2P 894851-89-9P 894851-92-4P
894851-97-9P 895237-57-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of heterocyclyl acrylamide compds. as FabI inhibitors)

RN 709652-79-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

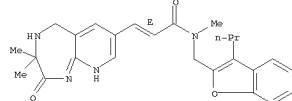
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



RN 894851-89-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

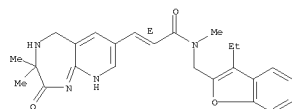
Double bond geometry as shown.



RN 894851-92-4 HCAPLUS

CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

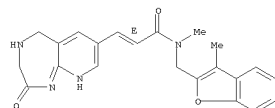
Double bond geometry as shown.



RN 894851-97-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

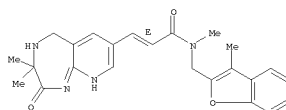
Double bond geometry as shown.



● HCl

L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)

Double bond geometry as shown.

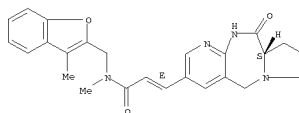


RN 894851-54-8 HCAPLUS

CN 2-Propenamide, 3-[(9a5)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.

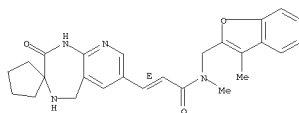


● HCl

RN 894851-76-4 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(1',2',4',5'-tetrahydro-2'-oxospiro[cyclopentane-1,3'-(3H)pyrido[2,3-e][1,4]diazepin]-7'-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 894851-82-2 HCAPLUS

CN 2-Propenamide, N-[(3-methyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.

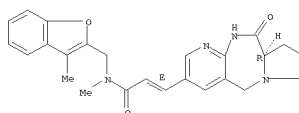
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)

RN 895237-57-7 HCAPLUS

CN 2-Propenamide, 3-[(9aR)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



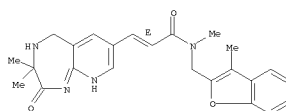
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894852-35-8P 894852-90-5P 894853-53-3P
895237-56-6P 895237-67-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclyl acrylamide compds. as FabI inhibitors)

RN 709652-77-7 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.



● HCl

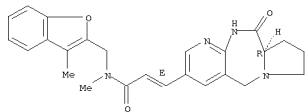
RN 894851-55-9 HCAPLUS

CN 2-Propenamide, 3-[(9aR)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

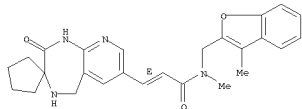
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)



● HCl

RN 894851-73-1 HCAPLUS
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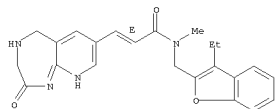
Double bond geometry as shown.



● HCl

RN 894851-80-0 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

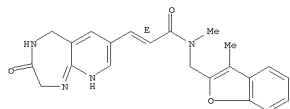


● HCl

RN 894851-84-4 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

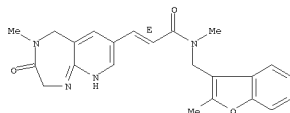
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)



● HCl

RN 894852-32-5 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

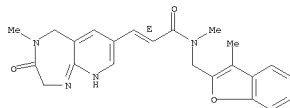
Double bond geometry as shown.



● HCl

RN 894852-35-8 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

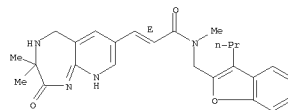


● HCl

RN 894852-90-5 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-4-phenyl-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

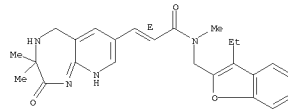
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)



● HCl

RN 894851-90-2 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

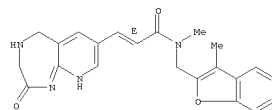
Double bond geometry as shown.



● HCl

RN 894851-99-1 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

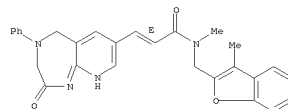
Double bond geometry as shown.



RN 894852-25-6 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)



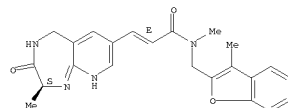
● HCl

RN 894853-53-3 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-[(2S)-2,3,4,5-tetrahydro-2-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl]-, (2E)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 894853-52-2
 CMF C23 H24 N4 O3

Absolute stereochemistry.
 Double bond geometry as shown.



CM 2

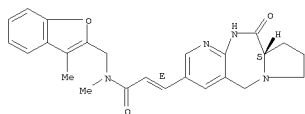
CRN 76-05-1
 CMF C2 H F3 O2



RN 895237-56-6 HCAPLUS
 CN 2-Propenamide, 3-[(9aS)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.

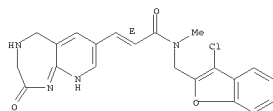
L27 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)



RN 895237-67-9 HCAPLUS

CN 2-Propenamide, N-((3-chloro-2-benzofuranyl)methyl)-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN

AN 2006:63668 HCAPLUS

DN 145:103734

TI Compositions comprising multiple antibiotic agents including a FabI inhibitor, methods of using the same, and preparation of the heterocycle FabI inhibitors

IN Berman, Judd M.; Schmid, Molly B.; Mendlein, John D.; Kaplan, Nachum

PA Affinium Pharmaceuticals, Inc., Can.

SO U.S. Pat. Appl. Publ., 192 pp., which which

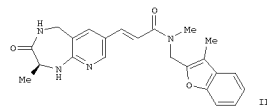
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US2006142265	A1	20060629	2005US-0231298	20050919
WO2004082586	A2	20040930	2004WO-IB01261	20040317
WO2004082586	A3	20041223		
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RW: BW, GH, GM, KE, LS, MW, ME, SD, SL, SE, SZ, TG, UG, ZM, ZW, AM, AE, BY, BG, KE, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TD				
PRAI 2003US-455189P	P	20030317		
2003US-476970P	P	20030609		
2003US-488379P	P	20030718		
2004WO-1501261	A2	20040317		
OS MAPPAT 145:103734				
GI				



AB The invention is directed to antibacterial compns. comprising an NADH (or NADPH)-dependent enoyl-acyl carrier protein (ACP) reductase (FabI), previously designated knvM) inhibitor of formula (VIa)-A-CH(R1)-NR(CO-L-R2) (I) and at least one other antibiotic/antibacterial agent (L = alkyl, alkenyl, or cycloalkyl which may be substituted by one or more R1; A = (un)substituted bicyclic heteroaryl of 8-12 atoms or a tricyclic ring of 12-16 atoms, containing 1-4 heteroatoms selected from N, S, and O; R1 = H, cycloalkyl, alk/aryl; R2 = heterocyclyl; a = 0-4; Y1 = -(CH2)n-CO-NR4R5; R4 = water solubilizing group; R5 = H, cycloalkyl; n = 0-4). The antibacterial composition exhibits a synergistic antibacterial effect compared to its individual components. Thus, bromination of (5)-2-methyl-1,2,4,5-tetrahydropyrido[2,3-e][1,4]diazepin-3-one (preparation given), coupling of the bromide with N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]acrylamide, and acidulation of the free base (no data) with TFA gave pyridodiazepine II•TFA. Selected I inhibited FabI with a Ki < 1 nM, an MIC (minimal inhibitory concentration) < 0.125 µg/mL, and an IC50 < 10 nM.

II 709652-79-9P, (E)-3-(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]-2-propenamide

RI: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

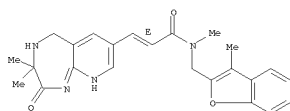
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (bactericide; compns. comprising multiple antibiotic agents and prepn. of heterocycle FabI inhibitor)

RN 709651-33-2P HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



II 709651-33-2P, (E)-N-[(Benzofuran-2-yl)methyl]-N-methyl-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-48-9P, (E)-N-Methyl-N-[(3-methylbenzofuran-3-yl)methyl]-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-53-6P, (E)-N-Methyl-N-(2-methylbenzofuran-3-yl)methyl]-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-82-1P, (E)-N-Methyl-N-(3-methylbenzofuran-2-yl)methyl]-3-(4-[3-(morpholin-4-yl)propyl]-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-85-4P, (E)-N-Methyl-N-(2-methylbenzofuran-3-yl)methyl]-3-(4-[3-(morpholin-4-yl)propyl]-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709652-77-7P 894851-54-8P 894851-55-9P 894851-73-1P 894851-80-OP, (E)-N-[(3-Ethylbenzofuran-2-yl)methyl]-N-methyl-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894851-84-4P 894851-90-2P 894851-97-9P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-25-6P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(3-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-32-5P, (E)-N-Methyl-N-[(2-methylbenzofuran-3-yl)methyl]-3-(4-methyl-3-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-48-OP 894852-90-5P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(2-oxo-4-phenyl-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894853-53-3P

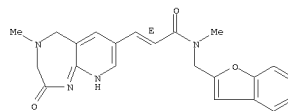
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (bactericide; compns. comprising multiple antibiotic agents and preparation of heterocycle FabI inhibitor)

RN 709651-33-2 HCAPLUS

CN 2-Propenamide, N-[(2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on SIN (Continued)

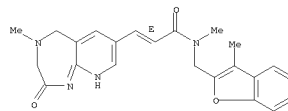


● HCl

RN 709651-48-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

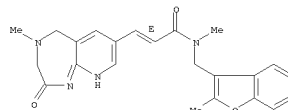


● HCl

RN 709651-53-6 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



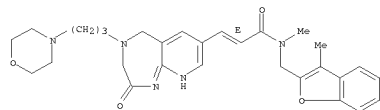
● HCl

RN 709651-82-1 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

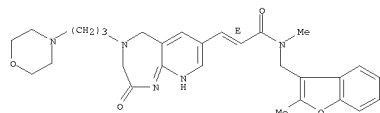
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



● HCl

RN 709651-85-4 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-[2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl]-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

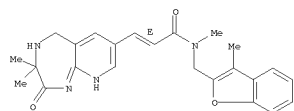
Double bond geometry as shown.



● HCl

RN 709652-77-7 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

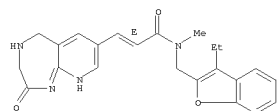


● HCl

RN 894851-54-8 HCAPLUS
CN 2-Propenamide, 3-[(9aS)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

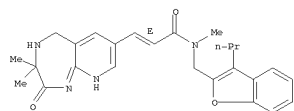
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



● HCl

RN 894851-84-4 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

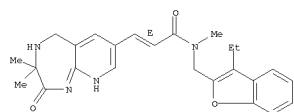
Double bond geometry as shown.



● HCl

RN 894851-90-2 HCAPLUS
CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

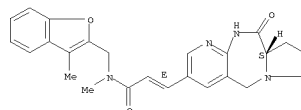


● HCl

RN 894851-97-9 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

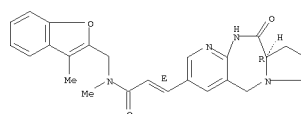
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



● HCl

RN 894851-55-9 HCAPLUS
CN 2-Propenamide, 3-[(9aR)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

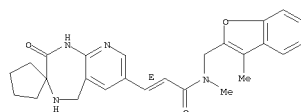
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



● HCl

RN 894851-73-1 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(1',2',4',5'-tetrahydro-2'-oxospiro[cyclopentane-1,3']-[3H]pyrido[2,3-e][1,4]diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

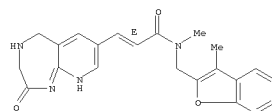


● HCl

RN 894851-80-0 HCAPLUS
CN 2-Propenamide, N-[(3-methyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

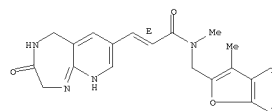
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



● HCl

RN 894852-25-6 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

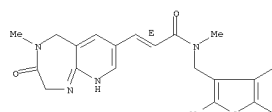
Double bond geometry as shown.



● HCl

RN 894852-32-5 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

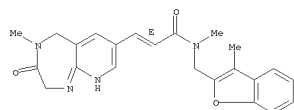


● HCl

RN 894852-35-8 HCAPLUS
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

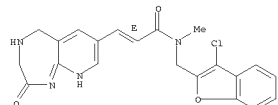
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)



● HCl

RN 894852-45-0 HCAPLUS
 CN 2-Propenamide, N-[(3-chloro-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

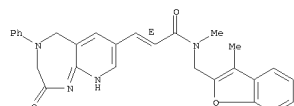
Double bond geometry as shown.



● HCl

RN 894852-90-5 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-4-phenyl-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.



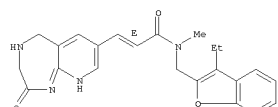
● HCl

RN 894853-53-3 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-[(2S)-2,3,4,5-tetrahydro-2-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl]-, (2E)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

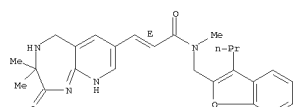
L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)

Double bond geometry as shown.



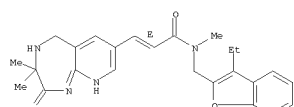
RN 894851-89-9 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



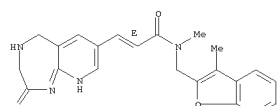
RN 894851-92-4 HCAPLUS
 CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



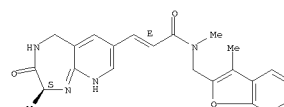
RN 894851-99-1 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



L27 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN (Continued)
 CPN 894853-92-2
 CMF C23 H24 N4 O3

Absolute stereochemistry.
 Double bond geometry as shown.



CM 2

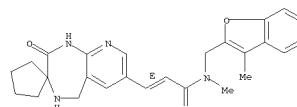
CPN 76-05-1
 CMF C2 H F3 O2



II 894851-76-4P 894851-82-2P, (E)-N-[(3-Ethylbenzofuran-2-yl)methyl]-N-methyl-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-2-propenamide 894851-89-9P, (E)-3-[(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-N-methyl-N-[(3-propylbenzofuran-2-yl)methyl]-2-propenamide 894851-92-4P, (E)-3-[(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-N-[(3-methylbenzofuran-2-yl)methyl]-N-methyl-2-propenamide 894851-99-1P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-2-propenamide
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; compns. comprising multiple antibiotic agents and preparation of heterocycle FabI inhibitor)

RN 894851-76-4 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(1',2',4',5'-tetrahydro-2-oxospiro[cyclopentane-1,3'-(3H)pyrido[2,3-e]-1,4-diazepin-7'-yl])- (2E)- (CA INDEX NAME)

Double bond geometry as shown.

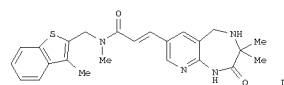


RN 894851-82-2 HCAPLUS
 CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

L27 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON SIN

AN 2004:799437 HCAPLUS
 DN 141:314353
 TI Compositions comprising multiple antibiotic agents including a FabI inhibitor, methods of using the same, and preparation of the heterocycle FabI inhibitors
 IN Berman, Judd M.; Schmid, Molly B.; Mendlein, John D.; Kaplan, Nachum
 PA Affinium Pharmaceuticals, Inc., Can.
 SO PCT Int. Appl., 311 pp.
 COSEN: PIXXD2
 DT Patent
 LA English
 FAN,CM1 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO2004082586	A2	20040930	2004WO-IB01261	20040317
WO2004082586	A3	20041223		
W:	AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LZ, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TH, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, CH, GM, KE, LS, MW, ME, SD, SE, SI, TI, US, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA---2519429	A1	20040930	2004CA-2519429	20040317
EP---1608377	A2	20051228	2004EP-0721257	20040317
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JP2006523207	T	20061012	2006JP-0506526	20040317
US2006422265	A1	20060629	2005US-0231298	20050919
PRAI 2003US-455189P	P	20030317		
2003US-476970P	P	20030609		
2003US-488379P	P	20030718		
2004WO-1801261	W	20040317		
OS	MARPAT 141:314353			
GI				



AB The invention is directed to antibacterial compns. comprising an NADH (or NADPH)-dependent enoyl-acyl carrier protein (ACP) reductase (FabI), previously designated EnvM) inhibitor of formula (Y1)-A-CH(R1)-NR1CO-L-R2 (I) and at least one other antibiotic/antibacterial agent [L = alkyl, alkenyl, or cycloalkyl which may be substituted by one or more R1; A = (un)substituted bicyclic heteroaryl of 8-12 atoms or a tricyclic ring of 12-16 atoms, containing 1-4 heteroatoms selected from N, S, and O; R1 = cycloalkyl, alk/aryl; R2 = heterocyclyl; a = 0-4; Y1 = -(CH2)n-CO-NR4R5; R4 = water solubilizing group; R5 = H, cycloalkyl; n = 0-4]. The antibacterial composition exhibits a synergistic antibacterial effect compared to its individual components. Thus, reacting 7-Bromo-3,3-dimethyl-1,3,4,5-tetrahydropyrido[2,3-e]-1,4-diazepin-2-one (preparation given) with N-Methyl-N-[(3-methylbenzo[b]thiophen-2-yl)methyl]acrylamide (preparation given), followed by acidulation gave diazepamone salt II•HCl. Selected I inhibited FabI with a KI < 1 nM, an MIC (minimal inhibitory concentration) < 0.125 µg/mL, and an IC50 < 10 nM.

II 709651-33-2P, (E)-N-[(Benzofuran-2-yl)methyl]-N-methyl-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-2-propenamide monohydrochloride 709651-48-9P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-2-propenamide monohydrochloride

L27 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

709651-53-6P (E)-N-Methyl-N-[(2-methylbenzofuran-3-ylmethyl)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-82-1P, (E)-N-Methyl-N-[(3-methylbenzofuran-2-ylmethyl)-3-[4-[3-(morpholin-4-yl)propyl]-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709651-85-4P, (E)-N-Methyl-N-[(2-methylbenzofuran-3-ylmethyl)-3-[4-[3-(morpholin-4-yl)propyl]-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709652-79-9P, (E)-3-(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]-2-propenamide

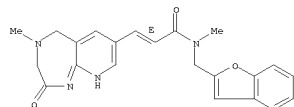
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Bactericide; compns. comprising multiple antibiotic agents and prepn. of heterocycle FabI inhibitor)

RN 709651-33-2 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

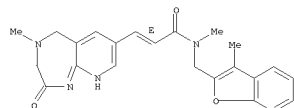


● HCl

RN 709651-48-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



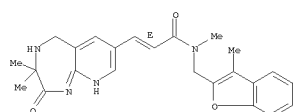
● HCl

RN 709651-53-6 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L27 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



L27 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

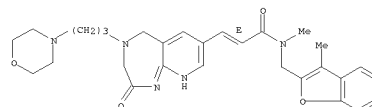
709651-82-1 HCAPLUS
2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 709651-82-1 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

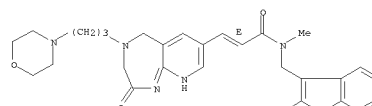


● HCl

RN 709651-85-4 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



● HCl

RN 709652-79-9 HCAPLUS

CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.

L27 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS ON STN

AN 2004:515512 HCAPLUS

CN

IN

TI Preparation of heterocyclic compounds as antibacterial agents
Berman, Judd; Sampson, Peter; Pauls, Heinz W.; Rannauth, Jallal; Manning, David Douglas; Surman, Matthew David; Xie, Dejian; Decornez, Helene Yvonne

PA Affinium Pharmaceuticals, Inc., Can.

SO PCT Int. Appl., 223 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN:CN1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO2004052890	A1	20040624	2003WO-US38706	20031205
M: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CR, CU, CY, DE, DK, DM, DS, EC, EE, ES, FI, GB, GD, GE, GH, GM, HP, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, ME, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SJ, TJ, TM, TR, TT, TS, UA, UG, US, VE, VC, VM, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, ME, SD, SL, SZ, TG, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BP, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU2002328937	A1	20040630	2003AU-028937	20031205
EP---1575651	A1	20050923	2003EP-0786699	20031005
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JP2006513262	T	20060420	2005JP-0508475	20031205
US2006183908	A1	20060817	2003US-0537747	20031205
PRAI 2002US-431406P	P	20021206		
2003US-465582P	P	20030425		
2003WO-US38706	W	20031205		

OS

AB

Compds. of formula (Y1)a-A-CH(R1)-NR1CO-L-R2 [I; L = a bond, is alkyl, alkenyl, or cycloalkyl which may be substituted with one or more R1; A = a bicyclic heteroaryl ring of 8-12 atoms or a tricyclic ring of 12-16 atoms, wherein the heteroaryl rings contain 1-4 heteroatoms selected from N, S, and O, and wherein the heteroaryl rings are optionally substituted with one or more groups selected from C1-4 alkyl, CH2OH, OR, SR, CN, N(R)2, CH2N(R)2, NO2, CF3, CO2R, CON(R)2, COR, NRC(O)R, F, Cl, Br, Iodo, and S(O)CF3 (R = H, alkyl, alkaryl; x = 0-2); R1 = H, alkyl, cycloalkyl, aryl, or alkaryl; R2 = heterocyclyl] or pharmaceutically acceptable salts thereof are prepared These compds. inhibit an NADH (or NADPH)-dependent enoyl-acyl carrier protein (ACP) reductase (FabI, previously designated EnoM) which is believed to be a major biosynthetic enzyme and is a key regulatory point in the overall synthetic pathway of bacterial fatty acid biosynthesis and catalyzes the final step of fatty acid biosynthesis in some bacteria. The present invention also relates to inhibitors and compns. comprising inhibitors of enzymes similar to FabI either structurally or functionally, such as, for example, FabK which is also believed to play a role in bacterial fatty acid synthesis. In another aspect of the present invention, the antibacterial compds. of the present invention may be used to disinfect an inanimate surface by administering the antibacterial compound to the inanimate surface. Thus, (E)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)acrylic acid hydrochloride was condensed with N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-[(1-propyl)naphthalen-2-yl)methyl]acrylamide in DMF using diisopropylethylamine, 1-hydroxybenzotriazole hydrate, and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride at room temperature for 18 h to give, after silica gel chromatog., 41% (E)-N-Methyl-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-[(1-propyl)naphthalen-2-yl)methyl]acrylamide as a glassy orange solid and as a mixture of amide rotamers. The compds. I inhibit FabI with a Ki of about 5 pM or less.

IT

709651-82-1P 709651-85-4P 709652-77-7P

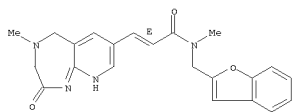
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of heterocyclic compds. as enoyl-acyl carrier protein reductase FabI inhibitors and antibacterial agents)

RN 709651-33-2 HCAPLUS

L27 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STM (Continued)
 CN 2-Propenamide, N-(2-benzofuranylmethyl)-N-methyl-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

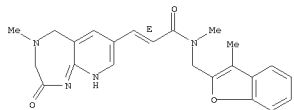
Double bond geometry as shown.



● HCl

RN 709651-48-9 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

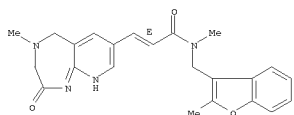
Double bond geometry as shown.



● HCl

RN 709651-53-6 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

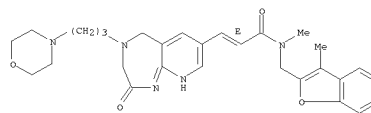


● HCl

RN 709651-82-1 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-

L27 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STM (Continued)
 tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

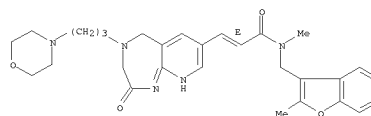
Double bond geometry as shown.



● HCl

RN 709651-85-4 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

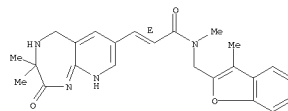
Double bond geometry as shown.



● HCl

RN 709652-77-7 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

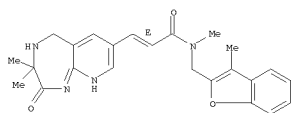


● HCl

RN 709652-79-9 HCAPLUS
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)-

L27 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STM (Continued)
 (CA INDEX NAME)

Double bond geometry as shown.



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=> b uspatall
FILE 'USPATFULL' ENTERED AT 16:37:09 ON 28 NOV 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 16:37:09 ON 28 NOV 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

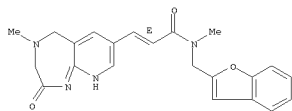
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CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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L29 ANSWER 1 OF 2 USPATFULL on STN
 AN 2006:215750 USPATFULL
 TI Heterocyclic compounds, methods of making them and their use in therapy
 IN Berman, Judd, Toronto, CANADA
 Sampson, Peter, Ontario, CANADA
 Pauls, Heinz W., Ontario, CANADA
 Rannauth, Jallali, Ontario, CANADA
 Douglas, David, Manning, NY, UNITED STATES
 Surman, Matthew David, Albany, NY, UNITED STATES
 Xie, Dejian, Glenmount, NY, UNITED STATES
 Decornez, Helene Yvonne, Clifton Park, NY, UNITED STATES
 PA Affinium Pharmaceuticals, Inc., Toronto, ON, CANADA, MSJ1V6 (non-U.S. corporation)
 PI US-20060183908 A1 20060817
 AI 2003US-000537747 A1 20031205 (10)
 2003WO-US00038706 20031205
 20060327 PCT 371 date
 PRAI 2002US-000431406P 20021206 (60)
 2003US-000465583P 20030425 (60)
 DT Utility
 FS APPLICATION
 LREP FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US
 CLMN Number of Claims: 49
 ECL Exemplary Claim: 1
 DRWN 8 Drawing Page(s)
 LN.CNT 7935

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB In part, the present invention is directed to antibacterial compounds of Formula (I) wherein A is a bicyclic heteroaryl ring or a tricyclic ring and R.sub.2 is an heterocyclic residue; L is a bond, or L is alkyl, alkenyl or cycloalkyl. ##STR1#

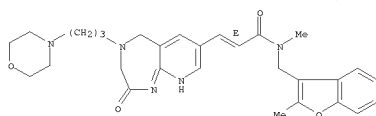
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 709651-33-2P 709651-48-9P 709651-53-6P
 709651-82-1P 709651-85-4P 709652-77-7P
 709652-79-9P
 (preparation of heterocyclic compds. as enoyl-acyl carrier protein reductase FabI inhibitors and antibacterial agents)
 RN 709651-33-2 USPATFULL
 CN 2-Propenamide, N-(2-benzofuranylmethyl)-N-methyl-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



● HCl

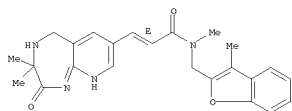
RN 709651-48-9 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

L29 ANSWER 1 OF 2 USPATFULL on STN (Continued)



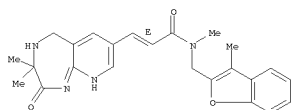
● HCl

RN 709652-77-7 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)
 Double bond geometry as shown.

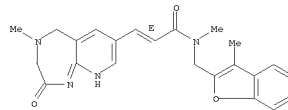


● HCl

RN 709652-79-9 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)
 Double bond geometry as shown.

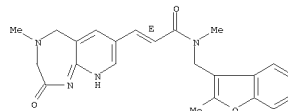


L29 ANSWER 1 OF 2 USPATFULL on STN (Continued)



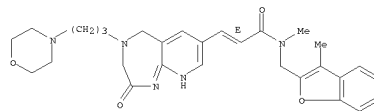
● HCl

RN 709651-53-6 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



● HCl

RN 709651-82-1 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

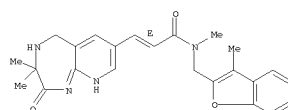


● HCl

RN 709651-85-4 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

L29 ANSWER 2 OF 2 USPATFULL on STN
 AN 2006:167754 USPATFULL
 TI Compositions comprising multiple bioactive agents, and methods of using the same
 IN Berman, Judd M., Toronto, CANADA
 Schmid, Molly B., Toronto, CANADA
 Mendlein, John P., Encinitas, CA, UNITED STATES
 Kaplan, Nachum, Toronto, CANADA
 PA Affinium Pharmaceuticals, Inc., Toronto, CANADA (non-U.S. corporation)
 PI US-20060142265 A1 20060629
 AI 2005US-000231298 A1 20050919 (11)
 RLI Continuation-in-part of Ser. No. 2004WO-IB0001261, filed on 17 Mar 2004.
 PRAI 2003US-000455189P 20030317 (60)
 2003US-000476970P 20030609 (60)
 2003US-000488379P 20030718 (60)
 DT Utility
 FS APPLICATION
 LREP FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US
 CLMN Number of Claims: 42
 ECL Exemplary Claim: 1
 DRWN 10 Drawing Page(s)
 LN.CNT 15944
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB In part, the present invention is directed to compositions comprising a FabI inhibitor and at least one other bioactive agent. In another part, the present invention is directed to antibacterial compositions comprising a compound of Formulas I-III and at least one other antibacterial agent.
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 IT 709652-79-9P, (E)-3-(3,3-dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]-2-propenamide (bactericide; compns. comprising multiple antibiotic agents and preparation of heterocycle FabI inhibitor)
 RN 709652-79-9 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)
 Double bond geometry as shown.

709652-79-9P, (E)-3-(3,3-dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]-2-propenamide monohydrochloride 709651-48-9P, (E)-N-Methyl-N-(2-methylbenzofuran-3-ylmethyl)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-53-6P, (E)-N-Methyl-N-(2-methylbenzofuran-3-ylmethyl)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-82-1P, (E)-N-Methyl-N-(3-methylbenzofuran-2-ylmethyl)-3-[4-(3-(morpholin-4-yl)propyl)-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709651-85-4P, (E)-N-Methyl-N-(2-methylbenzofuran-3-ylmethyl)-3-[4-(3-(morpholin-4-yl)propyl)-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709652-77-7P 894851-54-8P 894851-55-9P 894851-73-1P 894851-80-6P, (E)-N-[(3-Ethylbenzofuran-2-yl)methyl]-N-methyl-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894851-84-4P 894851-90-2P 894851-97-9P, (E)-N-Methyl-N-[(3-

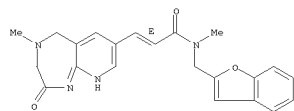


IT 709651-33-2P, (E)-N-[(Benzofuran-2-yl)methyl]-N-methyl-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-48-9P, (E)-N-Methyl-N-(3-methylbenzofuran-2-ylmethyl)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-53-6P, (E)-N-Methyl-N-(2-methylbenzofuran-3-ylmethyl)-3-(4-methyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide monohydrochloride 709651-82-1P, (E)-N-Methyl-N-(3-methylbenzofuran-2-ylmethyl)-3-[4-(3-(morpholin-4-yl)propyl)-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709651-85-4P, (E)-N-Methyl-N-(2-methylbenzofuran-3-ylmethyl)-3-[4-(3-(morpholin-4-yl)propyl)-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl]-2-propenamide monohydrochloride 709652-77-7P 894851-54-8P 894851-55-9P 894851-73-1P 894851-80-6P, (E)-N-[(3-Ethylbenzofuran-2-yl)methyl]-N-methyl-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894851-84-4P 894851-90-2P 894851-97-9P, (E)-N-Methyl-N-[(3-

L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)
 methylbenzofuran-2-yl)methyl]-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-25-6P,
 (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(3-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide
 hydrochloride 894852-32-5P, (E)-N-Methyl-N-[(2-methylbenzofuran-3-yl)methyl]-3-(4-methyl-3-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-35-6P,
 (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(4-methyl-3-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894852-45-0P 894852-90-5P,
 (E)-N-Methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(2-oxo-4-phenyl-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide hydrochloride 894853-53-3P
 (bactericide; compns. comprising multiple antibiotic agents and prepn. of heterocycle FcM1 inhibitor)

RN 709651-33-2 USPATFULL
 CN 2-Propenamide, N-(2-benzofuranylmethyl)-N-methyl-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

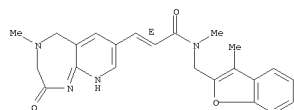
Double bond geometry as shown.



● HCl

RN 709651-48-9 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

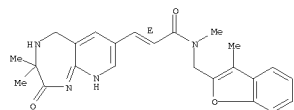


● HCl

RN 709651-53-6 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

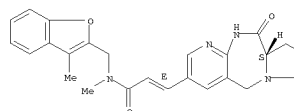
L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



● HCl

RN 894851-54-8 USPATFULL
 CN 2-Propenamide, 3-[(9aS)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

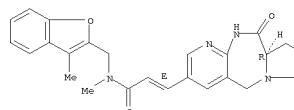
Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.



● HCl

RN 894851-55-9 USPATFULL
 CN 2-Propenamide, 3-[(9aR)-7,8,9,9a,10,11-hexahydro-10-oxo-5H-pyrido[2,3-e]pyrrolo[1,2-a][1,4]diazepin-3-yl]-N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.

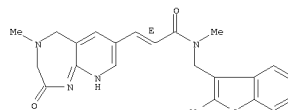


● HCl

RN 894851-73-1 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(1',2',4',5'-tetrahydro-2'-oxospiro[cyclopentane-1,3'-(3H)pyrido[2,3-e][1,4]diazepin]-7'-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

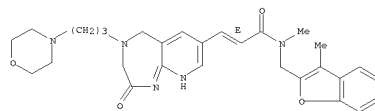
L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



● HCl

RN 709651-82-1 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

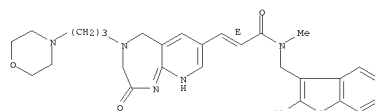
Double bond geometry as shown.



● HCl

RN 709651-85-4 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-[3-(4-morpholinyl)propyl]-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

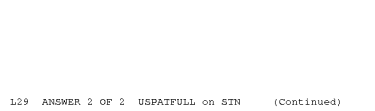
Double bond geometry as shown.



● HCl

RN 709652-77-7 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

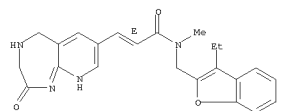
Double bond geometry as shown.



● HCl

RN 894851-80-0 USPATFULL
 CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

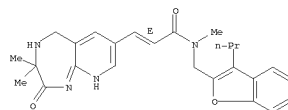
Double bond geometry as shown.



● HCl

RN 894851-84-4 USPATFULL
 CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

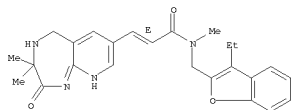


● HCl

RN 894851-90-2 USPATFULL
 CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

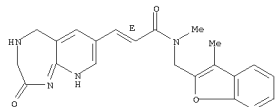
L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



● HCl

RN 894851-97-9 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

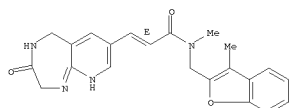
Double bond geometry as shown.



● HCl

RN 894852-25-6 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

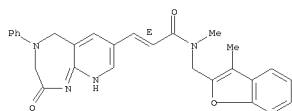


● HCl

RN 894852-32-5 USPATFULL
CN 2-Propenamide, N-methyl-N-[(2-methyl-3-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-4-phenyl-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

Double bond geometry as shown.

L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



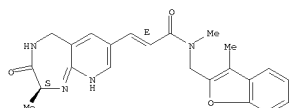
● HCl

RN 894853-53-3 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-[(2S)-2,3,4,5-tetrahydro-2-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl]-, (2E)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 894853-52-2
CMF C23 H24 N4 O3

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

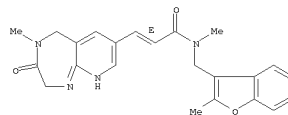


IT 894851-76-4P 894851-82-2P, (E)-N-[(3-Ethylbenzofuran-2-yl)methyl]-N-methyl-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide 894851-89-9P, (E)-3-(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-methyl-N-[(3-propylbenzofuran-2-yl)methyl]-2-propenamide 894851-92-4P, (E)-3-(3,3-Dimethyl-2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-N-[(3-ethylbenzofuran-2-yl)methyl]-N-methyl-2-propenamide 894851-99-1P, (E)-N-methyl-N-[(3-methylbenzofuran-2-yl)methyl]-3-(2-oxo-2,3,4,5-tetrahydro-1H-pyrido[2,3-e][1,4]diazepin-7-yl)-2-propenamide (intermediate; compns. comprising multiple antibiotic agents and preparation of heterocycle Fahl inhibitor)

RN 894851-76-4 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(1',2',4',5'-tetrahydro-2'-oxospiro[cyclopentane-1,3']-[3H]pyrido[2,3-e][1,4]diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.

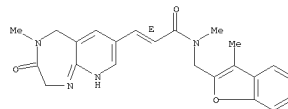
L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



● HCl

RN 894852-35-8 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-4-methyl-3-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

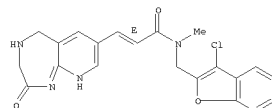
Double bond geometry as shown.



● HCl

RN 894852-45-0 USPATFULL
CN 2-Propenamide, N-[(3-chloro-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, monohydrochloride, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

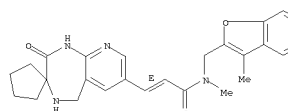


● HCl

RN 894852-90-5 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-4-phenyl-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, hydrochloride (1:1), (2E)- (CA INDEX NAME)

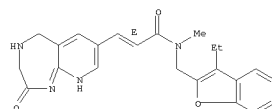
Double bond geometry as shown.

L29 ANSWER 2 OF 2 USPATFULL on STN (Continued)



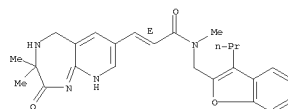
RN 894851-82-2 USPATFULL
CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



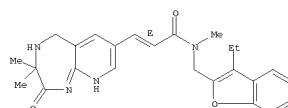
RN 894851-89-9 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-propyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

Double bond geometry as shown.



RN 894851-92-4 USPATFULL
CN 2-Propenamide, N-[(3-ethyl-2-benzofuranyl)methyl]-N-methyl-3-(2,3,4,5-tetrahydro-3,3-dimethyl-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

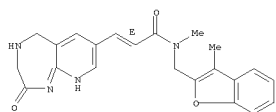
Double bond geometry as shown.



RN 894851-99-1 USPATFULL
CN 2-Propenamide, N-methyl-N-[(3-methyl-2-benzofuranyl)methyl]-3-(2,3,4,5-tetrahydro-2-oxo-1H-pyrido[2,3-e]-1,4-diazepin-7-yl)-, (2E)- (CA INDEX NAME)

L29 ANSWER 2 OF 2 USPATFULL on SIN (Continued)

Double bond geometry as shown.



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(FILE 'HOME' ENTERED AT 15:53:37 ON 28 NOV 2007)

FILE 'HCAPLUS' ENTERED AT 15:53:47 ON 28 NOV 2007

L1 1 US20060183908/PN

FILE 'REGISTRY' ENTERED AT 15:53:52 ON 28 NOV 2007

FILE 'HCAPLUS' ENTERED AT 15:53:52 ON 28 NOV 2007

L2 TRA L1 1- RN : 478 TERMS

FILE 'REGISTRY' ENTERED AT 15:53:52 ON 28 NOV 2007

L3 478 SEA L2

L4 18 L3 AND OC4-C6/ES

L5 7 L4 AND NC5-NC2NC3/ES

L6 35 C24H26N4O3 AND OC4-C6/ES

L7 3 L6 AND NC5-NC2NC3/ES

SEL RN 2-3

L8 2 E1-2 AND L7

FILE 'HCAPLUS' ENTERED AT 16:03:24 ON 28 NOV 2007

L9 4 L8

FILE 'REGISTRY' ENTERED AT 16:16:06 ON 28 NOV 2007

L10 5 L5 NOT L8

FILE 'HCAPLUS' ENTERED AT 16:16:24 ON 28 NOV 2007

L11 3 L10

FILE 'REGISTRY' ENTERED AT 16:17:11 ON 28 NOV 2007

L12 STR

L13 39 L12

L14 4856 L12 FULL

SAV TEM J747C1/A L14

L15 35 L14 AND NC5-NC2NC3/ES

L16 7 L15 AND L3

FILE 'HCAPLUS' ENTERED AT 16:24:39 ON 28 NOV 2007

L17 5 L15

L18 4 L17 AND L9,L11

L19 1 L17 NOT L18

FILE 'REGISTRY' ENTERED AT 16:27:30 ON 28 NOV 2007

L20 316 L14 AND NRRS>=3

L21 STR L12

L22 3 L21 SAM SUB=L14

L23 42 L21 FULL SUB=L14

SAV TEM L23 J747C1N/A

FILE 'HCAPLUS' ENTERED AT 16:31:53 ON 28 NOV 2007

L24 5 L23

L25 4 L24 AND L9,L11

L26 1 L24 NOT L25

L27 5 L9,L11,L17-19,L24-26

FILE 'HCAOLD' ENTERED AT 16:33:45 ON 28 NOV 2007

L28 0 L23

FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 16:34:42 ON 28 NOV 2007

L29 2 L23

FILE 'BIOSIS' ENTERED AT 16:35:42 ON 28 NOV 2007

L30 0 L23

FILE 'EMBASE' ENTERED AT 16:35:54 ON 28 NOV 2007

L31 0 L23

FILE 'MEDLINE' ENTERED AT 16:36:01 ON 28 NOV 2007

L32 0 L23
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